

CLAIMS:

1. A portable disassembleable display comprising a tubular framework that stands upon a floor surface, and a graphic display portion supported by the tubular framework, the tubular framework comprising:

a plurality of metallic tubular segments each of said plurality of tubular segments being at least two and one-half inches in diameter, said plurality including a first tubular segment and a second tubular segment, each of said first and second tubular segments having two end portions, at least one end portion of the first tubular segment having a first flange portion and at least one end portion of the second tubular segment having a second flange portion at the respective end portions, each of said flange portions having a radially extending set screw and at least one axially extending pin recess, each of the set screws adjustable radially into and out of the respective pin recesses, the first tubular end portion and the first flange portion in axial alignment and a confronting relationship with the second tubular end portion and the second flange portion, and the axially extending pin recess in the first flange portion in alignment with the second axially extending pin recess in the second flange portion; and

at least one connecting pin having an axis and extending into and between the aligned first and second axially extending pin recesses, the connecting pin having two set screw receiving regions engagable with the respective set screws such that the first and second tubular segments are securable together forming axially aligned conjoined tubular segments.

2. The portable disassemblable display of Claim 1, wherein the connecting pin is axially centered within the first and second flange portions.

3. The portable disassemblable display of Claim 1, wherein the first tubular end portion and the second tubular end portion have a connecting plate sandwiched therebetween, the connecting plate having opposite side surfaces and an aperture extending through the connecting plate with the connecting pin extending through said aperture.

4. The portable disassemblable display of Claim 3, wherein the connecting pin comprises two axially aligned separable connecting pin portions that removably attach together on the opposite sides of the connecting plate through said aperture, thereby securing the connecting plate between the two separable connecting pin portions.

5. The portable disassemblable display of Claim 3, wherein conjoined tubular end portions have a substantially cylindrical outer periphery and wherein the connecting plate has at least one connecting branch extending radially outward beyond the cylindrical outer periphery of the conjoined tubular end portions for attachment of at least one of the set comprising an end portion of a tubular segment and a hub.

6. The portable disassemblable display of Claim 5, wherein the connecting plate is configured as a hub connecting plate and wherein the at least one connecting branch has a first outer surface and an opposite second outer surface, the first outer surface having at least one recess extending into the connecting branch.

7. The portable disassemblable display of Claim 6, wherein the recess in the first outer surface does not extend through to the second outer surface.

8. The portable disassemblable display of Claim 6, further comprising a hub having a contoured side for engagement with the substantially cylindrical outer periphery of at least one of the conjoined tubular end portions, the hub further having a slot for receiving the at least one connecting branch and a securing member for engagement with the recess in the first outer surface of the at least one connecting branch.

9. The portable disassemblable display of Claim 8, wherein the securing member is a setscrew.

10. The portable disassemblable display of Claim 8, wherein the hub further includes a front face portion distal the slot, the front face portion having an axially extending central aperture for receiving a connector pin of a third tubular end portion for connecting a third tubing segment in radial alignment with the conjoined first and second tubular segments.

11. A portable disassembleable display comprising a tubular framework and a graphic display portion supported by the tubular framework, the display being self-standing upon a floor surface, the display comprising:

a plurality of tubular segments, said plurality of tubular segments being at least two and one-half inches in diameter and including a first tubular segment and a second tubular segment,

each of said first and second tubular segments having two end portions, the tubular end portions removably conjoined with a hub connecting plate sandwiched therebetween, the hub connecting plate having at least one outwardly extending connecting branch having a recess,

a hub having a contoured side for engagement with the substantially cylindrical outer periphery of the conjoined tubular end portions, the hub further having a slot for receiving the at least one connecting branch and a securing member for engagement with the recess of the at least one connecting branch;

at least one end portion of the first tubular segment having a first flange portion and at least one end portion of the second tubular segment having a second flange portion, each of said flange portions having a radially extending securing aperture and a set screw and at least one axially extending pin recess, each of the set screws adjustable radially into and out of the respective securing apertures;

wherein the first tubular end portion and the first flange portion are in axial alignment and a confronting relationship with the second tubular end portion and the second flange portion, and the axially extending pin recess in the first flange portion is in alignment with the second axially extending pin recess in the second flange portion; and

at least one connecting pin having an axis and extending between and into the aligned first and second axially extending pin recesses, the connecting pin having two set screw receiving regions engagable with respective set screws whereby the first and second tubular segments are secured together forming axially conjoined tubular end portions

12. A display constructed from a framework connecting system, the framework connection system comprising:

a first tubular frame member having two first member end portions having end portion apertures, and at least one first member flange secured within at least one of the first member end portions, the first member flange having at least one axially traversing connection aperture and a radially traversing securing aperture in communication with the respective end portion aperture;

a second tubular frame member having two second member end portions having end portion apertures, and at least one second member flange secured within at least one of the second member end portions, the second member flange having at least one axially traversing connection aperture and a radially traversing securing aperture in communication with the respective end portion aperture; and

a connector pin having two pin end portions, wherein one of the pin end portions extends into the axially traversing connection aperture of the first member flange and the other of the pin end portions extends into the axially traversing connection aperture of the second member flange, and wherein the first and second tubular frame members are abutably conjoined at the respective end portions and the connector pin end portions are secured in place by securing members inserted through the radially traversing securing apertures of the first and second member flanges.

13. The framework connection system of Claim 12, wherein the securing members are set screws.

14. The framework connection system of Claim 13, wherein at least one of the two pin end portions of the connector pin includes a radial groove adapted to engageably receive the securing member.

15. The framework connection system of Claim 12, wherein the first member flange and the second member flange further include at least one axially extending indexing aperture and at least one indexing pin such that insertion of the at least one indexing pin in the at least one axially extending indexing aperture of each of the member flanges of the conjoined tubular frame members provides rotation stability.

16. The framework connection system of Claim 12, further including a hub plate interposed between the conjoined first and second tubular frame members, the hub plate having a central plate portion, a central portion aperture, and at least one connecting branch having a branch recess and extending outward from the central plate portion.

17. The framework connection system of Claim 16, further comprising a hub having a securing member, a radial engagement aperture, and a branch receiving slot and a central hub aperture both extending axially into the hub and in communication with the radial engagement aperture, wherein the branch receiving slot slidably receives the at least one connecting branch and the securing member is adapted to securably engage the branch recess.

18. The framework connection system of Claim 17, wherein the hub further includes a connector pin, and the framework connection system further comprising a third tubular frame member and a third member flange secured within at least one end portion of the third frame member and having at least one axially traversing connection aperture such that the connector pin is secured within the axially traversing connection aperture of the third member flange and

the central hub aperture of the hub to conjoin the hub and third tubular frame member whereby the third tubular frame member extends radially in relation to the axially conjoined first and second tubular frame members.

19. The framework connection system of Claim 12, further including a cylindrical clamp collar having two c-shaped clamp portions, the cylindrical clamp collar further having a at least one securing member adapted to abuttably join the two c-shaped clamp portions together to shroudably engage an outer surface portion of at least one of the tubular frame members.

20. The framework connection system of Claim 19, wherein the two c-shaped clamp portions each include mateable hinge portions pivotably connected with a hinge pivot pin to permit selective rotational adjustment of the two c-shaped clamps.

21. The framework connection system of Claim 19, wherein the cylindrical clamp collar further includes a plurality of appurtenance attachment apertures and a peripheral surface having a plurality of surface flats, wherein at least one of the plurality of surface flats includes one of the appurtenance attachment apertures.

22. The framework connection system of Claim 21, wherein the appurtenance attachment apertures are adapted to receive appurtenances selected from a group consisting of: a shelf, an electronic display screen, a computer box, and a lighting device.

23. The framework connection system of Claim 18, wherein at least one of the first, second and third tubular frame members is curvilinear.

24. The framework connection system of Claim 12, wherein at least one of the end portions of at least one of the first and second tubular frame members is adapted to securely axially receive an end cap.

25. The framework connection system of Claim 12, wherein at least one of the end portions of at least one of the first and second tubular frame members is adapted to securely axially receive a base stand to provide standing floor support for the display.

26. The framework connection system of Claim 25, wherein the base stand is a foot pod having a threaded axial shaft and an elongate nut adjustable along at least a portion of the length of the shaft to provide height adjustment for the foot pod.

27. The framework connection system of Claim 26, wherein the foot pod further includes a ball joint therein to provide angular adjustment of the portion of the display being supported by the foot pod.

28. The framework connection system of Claim 12, further including a bracket device intermediate the conjoined first and second tubular frame members, the bracket device having a central bracket portion, a central bracket aperture, and at least one bracket branch extending

radially from the central bracket portion in relation to the axis of the conjoined frame members, the connector pin extending through the central bracket aperture.

29. The framework connection system of Claim 28, further including at least one connector block provided on the at least one bracket branch for connecting at least one peripheral frame segment to extend substantially parallel to the axis of the conjoined frame members.

30. A display constructed from a framework connection system, the framework connection system comprising:

at least a first tubular frame member and a second tubular frame member, each of the tubular frame members having a first end portion and a second end portion, and an end portion aperture radially traversing into at least one of the first and second end portions, the first and second tubular frame members further having a flange securely attached and axially aligned within at least one of the first and second end portions, the flange having at least one axially traversing aperture, and a radially traversing aperture in communication with the at least one end portion aperture;

at least one hub plate having a central portion, at least one connecting branch extending out from the central portion, and a pin receiving aperture extending through the central portion;

at least one connector pin extending through the central portion of the hub plate such that a first end and a second end of the connector pin are extending out from and transverse to the plane of the central portion and the at least one connecting branch; and

wherein the first tubular frame member and the second tubular frame member are axially conjoined at respective end portions with the hub plate interposed therebetween and the first end

of the connector pin extending into the axially traversing aperture of the flange of the first tubular frame member and the second end of the connector pin extending into the axially traversing aperture of the flange of the second tubular frame member, the ends of the connector pin being securely engaged through the respective tubular frame member end portion aperture.

31. The framework connection system of Claim 30, further comprising a hub having a securing member, a radial engagement aperture, and a branch receiving slot and a central hub aperture both extending axially into the hub and in communication with the radial engagement aperture, wherein the branch receiving slot slidably receives the at least one connecting branch and the securing member is adapted to securely engage the at least one connecting branch.

32. The framework connection system of Claim 31, wherein the hub further includes a connector pin, and the framework connection system further comprises a third tubular frame member and a third member flange secured within at least one end portion of the third frame member and having at least one axially traversing connection aperture such that the connector pin is secured within the axially traversing connection aperture of the third member flange and the central hub aperture of the hub to conjoin the hub and third tubular frame member whereby the third tubular frame member extends radially in relation to the axis of conjoined first and second tubular frame members.

33. A system for constructing and assembling and disassembling a floor display according to a selectively modular configuration, the system comprising:

a plurality of tubular frame segments, each with two end portions having a bore extending axially therein and an outer circumferential surface;

a plurality of connecting flanges, each adapted for axial alignable securement within the end portions of the tubular frame segments within the axial bore;

a plurality of connecting plates, each adapted to confrontingly secure between the connecting flanges of axial aligned tubular frame segments and having at least one outwardly extending connecting branch;

a plurality of hubs, each adapted to slidably engage the at least one connecting branch of the connecting plates and to engage the connecting flanges to provide for tubular frame segment connectivity; and

wherein the plurality of tubular frame segments, the plurality of connecting flanges, the plurality of connecting plates, and the plurality of hubs create an assembleable framework of the floor display for supporting graphical displays and appurtenances.

34. The system of Claim 33, further including at least one fixed angle corner device having a base portion extending along a first axis, and a fixed angle portion extending along a second axis different than the axis of the base portion, the base and fixed angle portions adapted for axial attachment to tubular frame segments at respective connecting flanges such that one of the tubular frame segments extends along the first axis and another of the tubular frame segments extends along the second axis.

35. The system of Claim 34, wherein the first axis and second axis are substantially ninety-degrees in relation to each other.

36. The system of Claim 33, further including at least one pivotable angle corner device having a base portion extending along a first axis, and a pivotable angle portion having a pivot pin connecting the base portion and the pivotable angle portion, wherein the pivotable angle portion is angularly adjustable in relation to the base portion at the pivot pin to extend along a variable second axis, the base and pivotable angle portions adapted for axial attachment to tubular frame segments at respective connecting flanges such that one of the tubular frame segments extends along the first axis and another of the tubular frame segments extends along the variable second axis.

37. The system of Claim 36, wherein the base portion includes at least one first indexing aperture and at least one first indexing pin having two end portions, and the pivotable angle portion includes at least one second indexing aperture, the first indexing pin adapted to removably engage at one end the first indexing aperture, and at the other end the second indexing aperture to lock the pivotable angle portion at a plurality of predefined axis for the variable second axis.

38. A method of constructing a display from a tubular framework connection system, comprising the steps of:

providing a first tubular frame segment having at least one first end portion including a radially extending securing aperture and an axially connected flange having at least one axial connector aperture;

providing a second tubular frame segment having at least one second end portion including a radially extending securing aperture and an axially connected flange having at least one axial connector aperture;

providing a connector pin having distal engagement grooves, the connector pin being disposed to extend between and into the axial connector apertures of the flanges of the first and second tubular frame segments such that one of the engagement grooves is aligned with the radially extending securing aperture of the first tubular frame segment and the other of the engagement grooves is aligned with the radially extending securing aperture of the second tubular frame segment; and

engaging a securing member through each of the radially extending securing apertures of the first and second frame segments for engagement with the respective engagement grooves of the connector pin to confrontingly axially conjoin the first and second frame segments.

39. A method of constructing a display from a tubular framework connection system, comprising the steps of:

providing a first tubular frame segment having at least one first end portion including a radially extending securing aperture and an axially connected flange having at least one axial connector aperture;

providing a second tubular frame segment having at least one second end portion including a radially extending securing aperture and an axially connected flange having at least one axial connector aperture, the second tubular frame segment being axially aligned with the first tubular frame segment;

providing a third tubular frame segment having at least one third end portion including a radially extending securing aperture and an axially connected flange having at least one axial connector aperture;

disposing a connector plate having at least one connecting aperture and at least one outwardly extending connecting branch between the axially aligned first and second tubular frame segments;

providing a connector pin having distal engagement grooves, the connector pin being disposed to extend between and into the axial connector apertures of the flanges of the first and second tubular frame segments and through the at least one connecting aperture of the connector plate such that one of the engagement grooves is aligned with the radially extending securing aperture of the first tubular frame segment and the other of the engagement grooves is aligned with the radially extending securing aperture of the second tubular frame segment;

engaging a securing member through each of the radially extending securing apertures of the first and second frame segments for engagement with the respective engagement grooves of the connector pin to confrontingly axially conjoin the first and second frame segments;

slidably engaging a receiving slot of a hub onto the at least one connecting branch of the connector plate; and

coupling the flange of the third tubular frame segment to the hub by securing one end of a hub connector pin through a receiving aperture of the hub and the other end of the hub connector pin through the axial connector aperture of the flange of the third tubular frame segment such that the third tubular frame segment extends transverse to the axially conjoined first and second frame segments.

40. An appurtenance connection system for connecting appurtenances to a tubular display framework, comprising:

at least one tubular frame segment having a circumferential outer surface and two end portions;

a first c-shaped clamp portion and a second c-shaped clamp portion joinable to form a cylindrical clamping device, each of the c-shaped clamp portions having a top surface, a bottom surface, an outer diametrical surface, and an inner diametrical surface, wherein at least one of the surfaces of at least one of the c-shaped clamp portions includes a plurality of attachment apertures therein for connecting appurtenances to the cylindrical clamping device; and

wherein the inner diametrical surfaces of the first and second c-shaped clamp portions are shroudably alignably engaged around the circumferential outer surface of the at least one tubular frame segment intermediate the two end portions and joined to form the cylindrical clamping device.

41. The appurtenance connection system of Claim 40, wherein the first c-shaped clamp portion and the second c-shaped clamp portion are joined at a hinge device to provide selective rotational adjustment of said clamp portions of the cylindrical clamping device.

42. The appurtenance connection system of Claim 40, wherein the inner diametrical surface of at least one of the c-shaped clamp portions includes a magnetic member to facilitate engagement with the circumferential outer surface of the at least one tubular frame segment.

43. The appurtenance connection system of Claim 40, wherein the outer diametrical surface of at least one of the c-shaped clamp portions includes a plurality of spaced surface flats having the attachment apertures for connecting appurtenances to the cylindrical clamping device.

44. The appurtenance connection system of Claim 43, wherein the top surface and the outer diametrical surface further include the attachment apertures for connecting appurtenances to the cylindrical clamping device.

45. The appurtenance connection system of Claim 40, wherein an appurtenance connectable to at least one of the attachment apertures of the cylindrical clamping device is selected from a group consisting of: a lighting device, a shelf, a table, a computer housing box, and a computer display screen.

46. The appurtenance connection system of Claim 40, further including
a tubing connection collar having a circular body portion and a collar aperture extending through the circular body portion, the tubing connection collar being coupled to the cylindrical clamping device at one of the attachment apertures;

a second tubing segment having two end portions and a flange axially secured to one of the end portions, the flange having an axially extending connecting aperture therein; and

a connector pin having two pin end portions, whereby one of the two pin end portions is removably connected into the collar aperture and the other of the two pin end portions is removably connected into the axially extending connecting aperture of the flange of the second

tubing segment such that the second tubing segment is joined with the cylindrical clamping device in a transverse relationship to the first tubing segment.

47. A display constructed from a framework connecting system, the framework connection system comprising:

- a first tubular frame member having two first member end portions having end portion apertures, and a first flange insertably axially secured within at least one of the first member end portions;

- a second tubular frame member having two second member end portions having end portion apertures, and a second flange insertably axially secured within at least one of the second member end portions;

- means for conjoining the first flange and the second flange such that the respective first member and second member end portions are axially conjoined; and

- means for lockably securing the means for conjoining the first flange and the second flange through the respective end portion apertures of the first member and second member end portions.

48. The framework connecting system of Claim 47, further comprising a hub plate interposed between the conjoined first and second flanges, the hub plate having at least one means for axially conjoining the hub plate between the first and second flanges and at least one means for receivably securing a hub to the hub plate.

49. The framework connecting system of Claim 47, further including means for limiting axial rotational movement of the respective first and second member end portions around the means for conjoining the first flange and the second flange.

50. The framework connecting system of Claim 48, further including a third tubular frame member having two third member end portions having end portion apertures, and a third flange insertably axially secured within at least one of the third member end portions.

51. The framework connecting system of Claim 50, further including means for axially conjoining the third flange to the hub distal the means for receivably securing the hub to the hub plate.

52. The framework connecting system of Claim 47, wherein at least one of the first tubular frame member and the second tubular frame member includes an outer circumferential surface, and further including means for selectively shroudably engaging a portion of the outer circumferential surface to facilitate the attachment of appurtenances to the at least one of the first tubular frame member and the second tubular frame member.